CLAIMS

1. A cosmetic or pharmaceutical composition comprising, in a physiologically acceptable medium, at least one purified, natural or synthetic polypeptide, the peptide sequence of which is represented wholly or partly by at least one sequence chosen from SEQ ID NO : 1, SEQ ID NO : 4, SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 8 ; SEQ ID NO : 9, SEQ ID NO : 16, SEQ ID NO : 25 and SEQ ID NO : 27, and homologs thereof.

2. The composition as claimed in claim 1, characterized in that said polypeptide has a peptide sequence represented by SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 16, SEQ ID NO : 25 or SEQ ID NO : 27.

3. The composition as claimed in claim 1 or 2, characterized in that said polypeptide is in a multimeric form, and preferably a dimeric form.

4. The composition as claimed in any one of claims 1 to 3, characterized in that said polypeptide has undergone one or more post-translational modifications.

5. The composition as claimed in any one of claims 1 to 4, characterized in that said polypeptide is in the form of a polypeptide of sequence SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 16, SEQ ID NO : 25 or SEQ ID NO : 27, fused with another polypeptide, a hydrophilic or hydrophobic targeting agent or a bioconversion precursor.

6. A cosmetic or pharmaceutical composition characterized in that it comprises, in a physiologically acceptable medium, at least one polypeptide mixture derived from the proteolysis of a polypeptide, the sequence of which is represented wholly or partly by the sequence SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 16, SEQ ID NO : 25 or SEQ ID NO : 27, or homologs thereof, and more

particularly the sequence of which is represented by SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 16, SEQ ID NO : 25 or SEQ ID NO : 27.

7. A method of cosmetic treatment intended to combat skin conditions related to a dysfunction of cell proliferation and/or differentiation, characterized in that a cosmetic composition comprising at least one polypeptide, the peptide sequence of which comprises at least one sequence chosen from SEQ ID NO : 1, SEQ ID NO : 4, SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 8, SEQ ID NO : 9, SEQ ID NO : 16, SEQ ID NO : 25 and SEQ ID NO : 27, and homologs thereof, or a mixture derived from the proteolysis of said polypeptide, is applied to the skin, the mucous membranes and/or the keratin fibers.

8. The method as claimed in claim 7, characterized in that said polypeptide has the sequence SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 16, SEQ ID NO : 25 or SEQ ID NO : 27.

9. The method of cosmetic treatment as claimed in claim 7 or 8, characterized in that it aims to treat dry skin, hyperkeratosis, parakeratosis, sebogenesis conditions, neoplasias and/or signs of skin aging.

10. The use of a polypeptide, the peptide sequence of which comprises at least one sequence chosen from SEQ ID NO : 1, SEQ ID NO : 4, SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 8, SEQ ID NO : 9, SEQ ID NO : 16, SEQ ID NO : 25 and SEQ ID NO : 27, and homologs thereof, and more particularly in which said peptide sequence is represented wholly or partly by SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 16, SEQ ID NO : 25 or SEQ ID NO : 27, or of a mixture derived from the proteolysis of said polypeptide, for preparing a pharmaceutical composition intended for the treatment of dermatological infections.

11. The use as claimed in claim 10, characterized in that the pharmaceutical composition is intended to treat ichtyosis, psoriasis, eczema,

rosacea, lichens, pruritus, or any pathologies involving hyperkeratosis or parakeratosis or having an inflammatory component.

12. The use of a polypeptide, the peptide sequence of which comprises at least one sequence chosen from SEQ ID NO : 1, SEQ ID NO : 4, SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 8, SEQ ID NO : 9, SEQ ID NO : 16, SEQ ID NO : 25 and SEQ ID NO : 27, and homologs thereof, for preparing an antiviral composition.

13. The use as claimed in claim 12, characterized in that said peptide sequence is represented by SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 16, SEQ ID NO : 25 or SEQ ID NO : 27.

14. The use of a chemical or biological compound, for preparing a composition intended to interact with or to modulate the biological activity of a polypeptide, the peptide sequence of which comprises at least one sequence chosen from SEQ ID NO : 1, SEQ ID NO : 4, SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 8, SEQ ID NO : 9, SEQ ID NO : 16, SEQ ID NO : 25 and SEQ ID NO : 27, and homologs thereof, and more particularly the peptide sequence of which is represented by SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 16, SEQ ID NO : 25 or SEQ ID NO : 27.

15. The use as claimed in claim 14, characterized in that the compound is a protease having a specific site for recognition and/or for binding and for cleavage within the sequence of said polypeptide.

16. The use as claimed in claim 14, characterized in that the compound is an inhibitor preferably chosen from retropepsin inhibitors.

17. The use as claimed in claim 14, characterized in that the compound is an activator.

18. The use as claimed in claim 14, characterized in that the compound is an antibody specific for said polypeptide.

19. The use of a polypeptide, the peptide sequence of which is represented by at least one sequence chosen from SEQ ID NO : 31, SEQ ID NO : 32, SEQ ID NO : 33, SEQ ID NO : 34 and SEQ ID NO : 35, for preparing a composition intended to modulate the activity of the SASPase.

20. A cosmetic or pharmaceutical composition, characterized in that it comprises, in a physiologically acceptable medium, at least one nucleotide sequence encoding a polypeptide as defined in claims 1 to 5, or a sense, antisense or interfering antisense sequence corresponding to said nucleotide sequence.

21. The composition as claimed in claim 20, characterized in that said nucleotide sequence consists of the coding nucleotide sequence SEQ ID NO : 20, SEQ ID NO : 24, SEQ ID NO : 26 or SEQ ID NO : 28.

22. The use of a biological or chemical compound, for preparing a composition intended to inhibit the dimerization of a polypeptide of sequence SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 16, SEQ ID NO : 25 or SEQ ID NO : 27.

23. The use of a polypeptide, the peptide sequence of which is chosen from SEQ ID NO : 1, SEQ ID NO : 4, SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 8, SEQ ID NO : 9, SEQ ID NO : 16, SEQ ID NO : 25 and SEQ ID NO : 27, and homologs thereof, as a screening tool.

24. The use of a polypeptide, the peptide sequence of which is chosen from SEQ ID NO : 1, SEQ ID NO : 4, SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 8, SEQ ID NO : 9, SEQ ID NO : 16, SEQ ID NO : 25 and SEQ ID NO : 27, and homologs thereof, for preparing a diagnostic tool.

25. The use of a polypeptide, the peptide sequence of which is chosen from SEQ ID NO : 1, SEQ ID NO : 4, SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 8, SEQ ID NO : 9, SEQ ID NO : 16, SEQ ID NO : 25 and SEQ ID NO : 27, and homologs thereof, and more particularly of a polypeptide, the sequence of

which is represented by SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 16, SEQ ID NO : 25 or SEQ ID NO : 27, of its proteolytic fragments or of any synthetic peptide deduced from the sequence of said polypeptide, for preparing or purifying, optionally from epidermis, any molecule capable of modulating its interaction with possible ligands.

26. The use of a polypeptide, the peptide sequence of which is chosen from SEQ ID NO : 1, SEQ ID NO : 4, SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 8, SEQ ID NO : 9, SEQ ID NO : 16, SEQ ID NO : 25 and SEQ ID NO : 27, and homologs thereof, and more particularly of a polypeptide, the sequence of which is represented by SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 16, SEQ ID NO : 25 or SEQ ID NO : 27, of its proteolytic fragments or of any synthetic peptide deduced from the sequence of said polypeptide, for selecting novel antiviral molecules having fewer side effects.

27. The use of a polypeptide, the peptide sequence of which is chosen from SEQ ID NO : 1, SEQ ID NO : 4, SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 8, SEQ ID NO : 9, SEQ ID NO : 16, SEQ ID NO : 25 and SEQ ID NO : 27, and homologs thereof, and more particularly of a polypeptide, the peptide sequence of which is represented by SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 16, SEQ ID NO : 25 or SEQ ID NO : 27, of its proteolytic fragments or of any synthetic peptide deduced from the sequence of said polypeptide, for preparing specific antisera and/or monoclonal antibodies aimed in particular at purifying said polypeptide and its fragments, or at modulating its activity.

28. An isolated and purified polypeptide belonging to the aspartic acid protease family, characterized in that it has a peptide sequence represented by SEQ ID NO : 6, SEQ ID NO : 16, SEQ ID NO : 25 or SEQ ID NO : 27.

29. The polypeptide as claimed in claim 28, characterized in that it has an apparent molecular mass of between 5 and 30 kD, more particularly of between 9 and 15 kD, and especially of between 11 and 14 kD.

30. The polypeptide as claimed in claim 28 or 29, characterized in that it is a multimeric form, and preferably a dimeric form.

31. The polypeptide as claimed in any one of claims 28 to 30, characterized in that it has a theoretical isoelectric point of between 3 and 9.

32. The polypeptide as claimed in any one of claims 28 to 31, characterized in that it is of natural origin and is purified from mammalian tissues.

33. The polypeptide as claimed in any one of claims 28 to 32, characterized in that it is purified from human skin, and more particularly from human epidermis.

34. The polypeptide as claimed in any one of claims 28 to 33, characterized in that it has undergone one or more post-translational modifications.

35. The polypeptide as claimed in claim 28 or one of claims 30 to 34, characterized in that it is in the form of a polypeptide of sequence SEQ ID NO : 6, SEQ ID NO : 16, SEQ ID NO : 25 or SEQ ID NO : 27, fused with another polypeptide, a hydrophilic or hydrophobic targeting agent or a bioconversion precursor.

36. A polyclonal or monoclonal antibody, characterized in that it specifically recognizes a polypeptide, the peptide sequence of which is represented by SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 16, SEQ ID NO : 25 or SEQ ID NO : 27.

37. The use of an antibody as defined in claim 36, for producing a composition intended for the diagnosis of a deficiency in or an overexpression of the SASPase protein.

38. The use of an antibody as defined in claim 36, for producing a composition intended to block the activity and/or the activation of the SASPase in the treatment of pathologies characterized by an over-

expression and/or an exaggerated activity of the SASPase.

39. An isolated and purified deoxyribonucleic acid fragment encoding a polypeptide as defined in one of claims 28 to 35.

40. An isolated and purified deoxyribonucleic acid fragment consisting of the coding nucleotide sequence SEQ ID NO : 20, SEQ ID NO : 24, SEQ ID NO : 26 or SEQ ID NO : 28.

41. A recombinant expression vector containing all or part of the coding nucleotide sequence SEQ ID NO : 20, SEQ ID NO : 24, SEQ ID NO : 26 or SEQ ID NO : 28.

42. The use of at least one deoxyribonucleic acid sequence as defined in claim 39 or 40, for preparing a sense, antisense or interfering antisense ribonucleic acid sequence.

43. A sense, antisense or interfering antisense ribonucleic acid corresponding at least to the coding nucleotide sequence SEQ ID NO : 20, SEQ ID NO : 24, SEQ ID NO : 26 or SEQ ID NO : 28.

44. The use of at least one sense or antisense sequence as defined in claim 43, for the purposes of cloning or identifying a polypeptide of sequence SEQ ID NO : 1, SEQ ID NO : 4, SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 8, SEQ ID NO : 9, SEQ ID NO : 16, SEQ ID NO : 25 or SEQ ID NO : 27, or of homologs thereof.

45. The use of at least one sense or antisense sequence as defined in claim 43, for preparing a composition intended for the diagnosis of a polypeptide of sequence SEQ ID NO : 1, SEQ ID NO : 4, SEQ ID NO : 5, SEQ ID NO : 6, SEQ ID NO : 7, SEQ ID NO : 8, SEQ ID NO : 9, SEQ ID NO : 16, SEQ ID NO : 25 or SEQ ID NO : 27, or of homologs thereof.